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MPSrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Dec 23 10:12:15 1999; MasPar time 3.26 Seconds
39.097 Million cell updates/sec

Tabular output not generated.

Title: >US-09-177-843-2

Description: (1-6) from US09177843.pap

Perfect Score: 41

Sequence: 1 GRGESP 6

Scoring table: PAM 150

Gap 15

Searched: 170751 seqs, 21266608 residues

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database: a-geneseq35

1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part12 13:part13
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23
24:part24 25:part25 26:part26 27:part27 28:part28
29:part29 30:part30 31:part31 32:part32 33:part33
34:part34 35:part35 36:part36 37:part37 38:part38
39:part39

Statistics: Mean 13.673; Variance 32.713; scale 0.418

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	41	100.0	6 39	W86168	Peptide used in gel c	7.31e+01
2	41	100.0	6 36	W66843	Peptide useful for al	7.31e+01
3	41	100.0	6 19	W07429	Control peptide used	7.31e+01
4	41	100.0	6 14	R79079	Integrin binding cont	7.31e+01
5	41	100.0	6 18	R98890	Control synthetic pep	7.31e+01
6	41	100.0	6 1	R04613	Antiviral agent.	7.31e+01
7	41	100.0	6 13	R71457	Control hexapeptide t	7.31e+01
8	41	100.0	6 25	W11185	Control peptide.	7.31e+01
9	41	100.0	6 18	W03491	Alpha(5)-Beta(1) inte	7.31e+01
10	41	100.0	6 28	W34090	Peptide SEQ ID NO:2 f	7.31e+01
11	41	100.0	8 31	W48562	Integrin receptor ant	7.31e+01
12	40	97.6	6 39	W86167	Peptide used in gel c	9.97e+01
13	40	97.6	6 35	W71248	Peptide sequence of t	9.97e+01
14	40	97.6	6 35	W79658	Cyclo(1,6)-Gly-Arg-Gl	9.97e+01
15	40	97.6	6 7	R37029	Peptide for isolating	9.97e+01
16	40	97.6	6 29	W45920	Control peptide #7.	9.97e+01

17	40	97.6	6 5	R27033	Peptide lipid contg.	9.97e+01
18	40	97.6	6 14	R79077	Alphas/betal integrin	9.97e+01
19	40	97.6	7 39	W86169	Peptide used in gel c	9.97e+01
20	40	97.6	7 36	W66819	Peptide used in purif	9.97e+01
21	40	97.6	8 4	R21014	Cyclised integrin rec	9.97e+01
22	40	97.6	10 7	R37836	Cell adhesion motif e	9.97e+01
23	40	97.6	10 7	R36718	Adhesion formation pr	9.97e+01
24	40	97.6	10 27	W31337	Quaternary amine lipi	9.97e+01
25	40	97.6	12 31	W48513	Integrin receptor ant	9.97e+01
26	40	97.6	20 38	W81846	Fibronectin-like pept	9.97e+01
27	40	97.6	39 22	W06684	Protamine-like peptid	9.97e+01
28	40	97.6	48 19	R95141	Collagen like protein	9.97e+01
29	40	97.6	106 7	R35674	Tryptophan aporepress	9.97e+01
30	40	97.6	106 7	R35553	Tryptophan aporepress	9.97e+01
31	40	97.6	108 7	R35697	Tryptophan aporepress	9.97e+01
32	40	97.6	108 7	R35542	Tryptophan aporepress	9.97e+01
33	40	97.6	111 7	R35685	Tryptophan aporepress	9.97e+01
34	40	97.6	112 7	R35686	Tryptophan aporepress	9.97e+01
35	40	97.6	274 8	R40163	Human FN peptide frag	9.97e+01
36	40	97.6	277 24	W13566	Human fibronectin pro	9.97e+01
37	40	97.6	302 25	W33352	Oligopeptide C277-CS1	9.97e+01
38	40	97.6	330 3	R15146	EGF-fibronectin fusio	9.97e+01
39	40	97.6	332 3	R15145	EGF-fibronectin fusio	9.97e+01
40	40	97.6	337 4	R20129	SEQ ID No. 4 of the c	9.97e+01
41	40	97.6	411 2	R11672	Cell adhesive and fib	9.97e+01
42	40	97.6	489 25	W33343	Protein used in devel	9.97e+01
43	40	97.6	549 11	R60349	Chimeric inhibitory F	9.97e+01
44	40	97.6	574 25	W33349	Oligopeptide CH-296.	9.97e+01
45	40	97.6	2386 34	W63171	Amino acid sequence o	9.97e+01

ALIGNMENTS

RESULT 1

ID W86168 standard; peptide; 6 AA.

DT 04-MAR-1999 (first entry)

DE Peptide used in gel contraction assays.

KW Wound contraction; reduction; inhibition; tissue regeneration; scar;

OS Synthetic.

PN U55851994-A.

PD 22-DEC-1998.

PF 06-JUN-1995; 473025.

PR 06-JUN-1995; US-473025.

PR 28-APR-1994; US-234979.

PA (LJOL-) LA JOLLA CANCER RES FOUND.

PI Polarek J, Schreiber R;

DR WPI; 99-080478/07.

PT Inhibition of wound contraction - with peptide derivatives rich in

PS basic amino acids

PS Example 2; Column 13; 16pp; English.

CC The invention provides methods for reduction or inhibition of wound contraction that comprises administration of a peptide having more than 3 consecutive basic amino acid residues. Alternatively, the peptide contains the amino acid sequence Arg-Gly-Asp and a basic amino acid sequence, or the peptide comprises 6-30 amino acids in which at least 4 out of a sequence of 6 consecutive amino acids are basic amino acids.

CC The method is used to allow normal tissue regeneration without excessive scar formation which, in the case of large wounds, can result in loss of joint motion or major body deformation. This peptide is used in gel contraction assays along with the claimed peptides (W86170-83) to determine the activity of a peptide to reduce or inhibit gel contraction.

CC Sequence 6 AA;

Query Match 100.0%; Score 41; DB 39; Length 6;

Best Local Similarity 100.0%; Pred. No. 7.31e+01;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6

Qy 1 GRGESP 6

RESULT 2
 ID W6843 standard; peptide; 6 AA.
 AC W6843;
 DT 10-DEC-1998 (first entry)
 DE Peptide useful for altering bone resorption.
 KW bone resorption; pharmacore; angiogenesis; restenosis; integrin receptor;
 KW alpha v beta 3 integrin receptor; osteoclast.
 OS Synthetic.
 PN US5807819-A.
 PD 15-SEP-1998.
 PF 12-APR-1995; 421698.
 PR 12-APR-1995; US-421698.
 PR 15-APR-1994; US-227316.
 PR 08-SEP-1994; US-303052.
 PA (LJOL-) LA JOLLA CANCER RES CENT.
 PI Cheng S, Ingram R, Mullen D, Tschopp JF;
 DR WPI; 98-555601/47.
 PT Use of peptide derivatives which can alter integrin receptor binding
 PT - for altering bone resorption, treating angiogenesis or restenosis
 PT and altering integrin receptor mediated interactions
 PS Example 2; Figure 2A; 87pp; English.
 CC A new method is claimed for altering bone resorption. It comprises
 CC administration of a peptide of formula: $X_1X_2X_3X_4GX_5X_6X_7X_8$; where X_1 =
 CC R_1R_2N or 0-10 amino acids (optionally protected by acetylation at the N-
 CC terminus); X_2 = absent or 1 amino acid; X_3 = absent or 1 or 2 amino
 CC acids; X_4 = N-Me-Arg; X_5 = residue which provides an ionic interaction
 CC with an integrin receptor, or is Msa, Paa or Ifsa; X_6 = residue which
 CC has an aliphatic side chain; a non-natural amino acid that is
 CC hydrophobic; or Thr; X_7 = a residue capable of forming a bond (i) with a
 CC bridging amino acid of X_2 , (ii) with X_3 when X_2 is absent, or (iii) with
 CC X_4 when X_2 and X_3 are absent, to conformationally restrain the peptide;
 CC X_8 = NR_3R_4 ; OR5; or 0-10 amino acids, optionally protected as an amide at
 CC the C-terminus; R_1 , R_3 - R_5 = H or alkyl; R_2 = H, alkyl, alkyl-CO or
 CC phenyl-CO. The peptides are useful for inhibiting bone resorption
 CC angiogenesis or restenosis, and for altering integrin receptor-mediated
 CC interactions, especially alpha v beta 3 integrin receptor-mediated
 CC binding of cells to a matrix. They may be used for reducing or inhibiting
 CC osteoclast binding to a matrix. The present sequence represents an
 CC example of a peptide disclosed in the specification.
 SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 36; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 3
 ID W07429 standard; peptide; 6 AA.
 AC W07429;
 DT 21-JAN-1997 (first entry)
 DE Control peptide used in tumour invasion-inhibition assay.
 KW tumour invasion; extracellular matrix; ECM; metastasis; RGD sequence;
 KW cancer; inhibition; control.
 OS Synthetic.
 PN US5547936-A.
 PD 20-AUG-1996.
 PF 22-NOV-1983; 554821.
 PR 22-NOV-1983; US-554821.
 PR 17-JUN-1985; US-744981.
 PR 10-MAR-1988; US-166530.
 PR 09-SEP-1988; US-242713.
 PR 25-FEB-1991; US-660526.
 PR 10-APR-1991; US-683585.
 PR 08-OCT-1991; US-773106.
 PR 19-JUN-1992; US-902742.
 PR 19-DEC-1993; US-169743.
 PA (LJOL-) LA JOLLA CANCER RES FOUND.
 PI Gehlsen KR, Pierschbacher MD, Ruoslahti EI;

DR WPI; 96-392651/39.
 PT Inhibiting tumour cell invasion through an extracellular matrix -
 PT using peptide contg. the RGD sequence, partic. for preventing tumour
 PT metastasis
 PS Example 3; Column 7-8; 8pp; English.
 CC W07429 is a control peptide used in an assay for testing peptides
 CC for tumour-invasion inhibitory activity. The peptides suspected of
 CC having this ability contained the RGD sequence (Arg-Gly-Asp). The
 CC control did not and was not expected to show any inhibitory action.
 CC Other peptides tested (see W07430-W06433) did show inhibitory
 CC activity, these peptides can be used to treat cancer and to prevent
 CC metastasis, in partic. invasion of the extracellular matrix (ECM).
 CC The peptides are also soluble.
 SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 19; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 4
 ID R79079 standard; peptide; 6 AA.
 AC R79079;
 DT 24-JAN-1996 (first entry)
 DE Integrin binding control peptide.
 KW High affinity; integrin binding peptide; alpha5/beta1; alphav/beta5;
 KW alphav/beta3; RGD; stable configuration; wound healing;
 KW osteoclast attachment; bone; angiogenesis; metastasis; tumour;
 KW smooth muscle cell migration.
 OS Synthetic.
 PN W09514714-A1.
 PD 01-JUN-1995.
 PF 22-NOV-1994; UI3542.
 PR 24-NOV-1993; US-158001.
 PR 04-AUG-1994; US-286861.
 PA (LJOL-) LA JOLLA CANCER RES FOUND.
 PI Koivunen E, Ruoslahti E;
 DR WPI; 95-206899/27.
 PT High affinity integrin binding peptides - can be used to attach
 PT cells to a substrate, inhibit the attachment of osteoclasts to bone,
 PT promote wound healing, inhibit angiogenesis, metastasis of tumours
 PT and migration of smooth muscle cells
 PS Example 6; Page 29; 85pp; English.
 CC The sequences given in R76185-200 and R79073-94 are high affinity
 CC integrin binding peptides which bind to various integrins. Peptides
 CC which bind to alpha5/beta1 integrins contain the motifs given in
 CC R76185-86 and peptides which bind to alphav/beta5 and alphav/beta3
 CC integrins contain the motif given in R76187. Alphav/beta5 integrins
 CC are also bound by RGD containing peptides. These peptides assume a
 CC conformationally stabilised configuration which is due to the
 CC formation of a disulphide bond, a peptide bond or a lactam bond.
 CC These peptides may be used for isolating the complementary integrin
 CC from a sample mixture by contacting them under ionic conditions to
 CC allow binding of the integrin to the peptide and then separating the
 CC integrin from the peptide. They can be used for attaching cells to
 CC a substrate, by binding them to the substrate with the cell. The
 CC peptides promote wound healing when applied locally and inhibit the
 CC attachment of osteoclasts to bone. They inhibit angiogenesis,
 CC metastasis of tumours and migration of smooth muscle cells. This
 CC peptide had no effect on integrin binding and was used as a control.
 SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 14; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 5
 ID R9890 standard; peptide; 6 AA.
 AC R9890;
 DT 05-NOV-1996 (first entry)
 DE Control synthetic peptide ligand.
 KW fibrinogen; blood clotting; GPIIb-IIIa receptor; binding; complex;
 KW epitope; exposed; monoclonal antibody.
 OS Synthetic.
 PN US5470738-A.
 PD 28-NOV-1995.
 PF 08-JUL-1987; 070953.
 PR 08-JUL-1987; US-070953.
 PR 31-MAR-1988; US-175342.
 PR 05-OCT-1989; US-417565.
 PR 04-OCT-1993; US-131320.
 PA (SCRI) SCRIPPS RES INST.
 PI Freilinger AL, Ginsberg MH, Plow EF;
 DR WPI: 96-019874/02.
 DT Monoclonal antibodies specific for ligand-bound GPIIb-IIIa receptor
 PT - useful for detection of clotting disorders and thrombi
 FS Example 5; Column 25; 20pp; English.
 CC Monoclonal antibodies specific for a ligand-induced binding site on
 CC GPIIa, esp. one induced in a platelet-associated GPIIb-IIIa/fibrinogen
 CC complex are claimed. The MAB binds an epitope exposed upon binding of
 CC the ligand and receptor. The epitope is not present on non-bound ligand
 CC or receptor. The MABs are useful to prevent blood clotting and in
 CC diagnostics. The present sequence is a synthetic peptide ligand used to
 CC show the specificity of the antibody-binding only in association with
 CC RGD-contg. ligands.
 CC Sequence 6 AA;
 SQ

Query Match 100.0%; Score 41; DB 18; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 6
 ID R04613 standard; protein; 6 AA.
 AC R04613;
 DT 05-SEP-1990 (first entry)
 DE Antiviral agent.
 KW Antiviral; M2; poliovirus; polio; hepatitis.
 OS Synthetic.
 PN J02078631-A.
 PD 19-MAR-1990.
 PF 14-SEP-1988; 228843.
 PR 14-SEP-1988; JP-228843.
 PA (NTHA) Nippon Mining KK.
 DR WPI: 90-129050/17.
 PT Antiviral agent contg. tripeptide (unit) -
 PT of basic aminoacid, then alanine, glycine or sarcosine, and
 PT acidic aminoacid, effective against virus with protein-terminated DNA
 PT or RNA.
 PS Disclosure; 4pp; Japanese.
 CC Peptide is effective against inhibiting propagation of DNA or RNA
 CC bonded, protein containing viruses eg. Poliovirus, Hepatitis virus.
 CC Sequence 6 AA;
 SQ

Query Match 100.0%; Score 41; DB 1; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 7
 ID R71457 standard; peptide; 6 AA.
 AC R71457;
 DT 20-OCT-1995 (first entry)
 DE Control hexapeptide to measure transmembrane force transfer.
 KW fibronectin; cytoskeleton; transmembrane force transfer; diagnostic;
 KW characterise cell; mechanical stimulation; ferromagnetic bead.
 OS Synthetic.
 PN W09506248-A.
 PD 02-MAR-1995.
 PF 25-AUG-1994; U09685.
 PR 25-AUG-1993; US-112757.
 PA (CHIL) CHILDRENS MEDICAL CENT.
 PI Butler JP, Fredberg JU, Ingber DE, Wang N;
 DR WPI: 95-106940/14.
 DT System for applying mechanical loads to specific cell surface
 PT molecules - using ferromagnetic beads coated with attachment
 PT molecules, and alignment and twisting magnetic fields, e.g. for
 PT screening therapeutic agents, toxins etc.
 FS Example 1; Page 19; 42pp; English.
 CC The system of the invention is used to determine the effect of
 CC mechanical stimulation of mols. present on a cell surface.
 CC Ferromagnetic microbeads are coated with attachment mols. eg. matrix
 CC mols., etc. that physically interconnect with distinct cytoskeletal
 CC proteins. A strong external magnetic field is applied to the beads, to
 CC impose a defined mechanical stress. Transmembrane force transfer is
 CC measured and the cells observed for changes in stiffening and twisting.
 CC To demonstrate the specificity of transmembrane force transfer in
 CC living endothelial cells, a soluble synthetic peptide (R71456) was
 CC included in the culture medium as a competitor. The fibronectin
 CC peptide inhibited cytoskeletal stiffening whereas this control
 CC hexapeptide with a single amino acid substitution had no
 CC inhibitory effects.
 CC Sequence 6 AA;
 SQ

Query Match 100.0%; Score 41; DB 13; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 Qy 1 GRGESP 6

RESULT 8
 ID W1185 standard; Peptide; 6 AA.
 AC W1185; 1998 (first entry)
 DT 15-JAN-1998 (first entry)
 DE Control peptide.
 KW Breast tumour homing peptide; cancer; in vivo panning; screening;
 KW phage display; drug delivery.
 OS Synthetic.
 PN W09710507-A1.
 PD 20-MAR-1997.
 PF 10-SEP-1996; U14600.
 PR 11-SEP-1995; US-526710.
 PR 11-SEP-1995; US-526708.
 PA (LJOL) LA JOLLA CANCER RES FOUND.
 PI Pasqualini R, Ruoslahti E;
 DR WPI: 97-202359/18.
 DT Obtaining compound that homes to selected organ or tissue - by in
 PT vivo panning method, specifically to identify brain, kidney,
 PT angiogenic vasculature or tumour tissue homing peptide(s)
 PS Example 3; Page 64; 75pp; English.
 CC Conjunction of this synthetic inactive control peptide with phage
 CC expressing an RGD-containing breast tumour-homing peptide had no
 CC effect on the amount of phage expressing the tumour homing peptide
 CC in the tumour. Tumour homing peptides (see W13412-52) have been
 CC selected using a novel in vivo panning method and are useful for
 CC delivering e.g. toxins, drugs and labels to selected organs or
 CC tissues.
 CC Sequence 6 AA;
 SQ

Query Match 100.0%; Score 41; DB 25; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 QY 1 GRGESP 6

RESULT 9
 ID W03491 standard; peptide; 6 AA.
 AC W03491.
 DT 24-OCT-1996 (first entry)
 DE Alpha(5)-Beta(1) integrin binding peptide 9.
 KW Synthetic; fibronectin; vitronectin; integrin; binding motif; adhesion;
 OS Extracellular matrix protein; tumour metastasis.
 OS Synthetic.
 PN US5536814-A.
 PD 16-JUL-1996.
 PF 27-SEP-1993; 127422.
 PR 27-SEP-1993; US-127422.
 PR 11-MAR-1994; US-212186.
 PA (LJOL-) LA JOLLA CANCER RES FOUND.
 PI Kolvunen E, Ruoslahti E;
 DR WPI; 96-341556/34.
 PT Synthetic integrin-binding peptide(s) - useful for inhibiting tumour
 PT metastasis, etc.
 PS Disclosure; Fig 4A; 16pp; English.
 CC Peptides W03483-508 are examples of synthetic peptides generated to bind
 to the fibronectin/vitronectin-binding integrin alpha(5)beta(1). They
 are synthesised to contain the alpha(5)beta(1)-integrin peptide binding
 motifs: DGR, NGR or RGD. The peptides interfere with the binding of
 CC fibronectin and vitronectin to this integrin and thus may be used to
 CC block integrin-mediated cell adhesion to extracellular matrix proteins,
 CC esp. to inhibit tumour metastasis.
 SQ Sequence 6 AA;

Query Match 100.0%; Score 41; DB 18; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 QY 1 GRGESP 6

RESULT 10
 ID W34090 standard; peptide; 6 AA.
 AC W34090;
 DT 05-MAY-1998 (first entry)
 DE Peptide SEQ ID NO:2 from W09739773 Example 1.
 KW Beta-1 cell surface receptor; beta-1 integrin-binding domain;
 KW cancer; tenascin; inflammation; receptor stimulator; fibrin;
 KW inhibitor; leucocyte migration.
 OS Unidentified.
 PN W09739773-A1.
 PD 30-OCT-1997.
 PF 22-APR-1997; U06577.
 PR 22-APR-1996; US-635572.
 PA (UYCO) UNIV COLOMBIA NEW YORK.
 PI Loike J, Silverstein SC;
 DR WPI; 97-535582/49.
 PT Treating infection caused by in-dwelling devices - also similar
 PT methods for treating cancers coated with tenascin and treating
 PT inflammation with receptor stimulators
 PS Example 1; Page 27; 91pp; English.
 CC A novel method has been developed for treating infection caused by
 CC bacteria on the surface of an in-dwelling foreign body, over and
 CC around which fibrin has been deposited. The method comprises
 CC administration of an agent that inhibits signalling mediated by a
 CC beta 1-integrin cell surface receptor on leucocytes. The agent enhances
 CC migration of leucocytes in and through the fibrin so that they can

reach and kill the bacteria. The present sequence represents a
 peptide which is mentioned but not used in the present invention.
 Treatment with the agent overcomes the inhibitory effects of
 fibrin or tenascin on leucocyte migration.

Query Match 100.0%; Score 41; DB 28; Length 6;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgesp 6
 |||||
 QY 1 GRGESP 6

RESULT 11
 ID W48562 standard; peptide; 8 AA.
 AC W48562.
 DT 18-AUG-1998 (first entry)
 DE Integrin receptor antagonist peptide 101.
 KW Integrin receptor antagonist; cell adhesion modulator; leukocyte;
 KW extracellular matrix; fibronectin; ARDS; thrombosis; inflammation.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT Modified_site 1
 FT Disulfide_bond 1.8
 FT /note= "attached by 1-Adamantaneacetic acid"
 PN US5721210-A.
 PD 24-FEB-1998.
 PF 07-JUN-1995; 485019.
 PR 04-JUN-1993; US-961889.
 PR 09-JUL-1990; US-550330.
 PR 09-JUL-1991; WO-U04862.
 PR 07-JUN-1995; US-485019.
 PA (TANA) TANABE SEIYAKU CO.
 PI Cardarelli FW, Chiang S, Lobl TJ;
 DR WPI; 98-168442/15.
 PT New cyclic peptide(s) and peptidomimetic compounds - are integrin
 PT receptor antagonists useful in modulating cell adhesion.
 PS Example 10; Column 46; 32pp; English.
 CC The present sequence represents a synthetic peptide which
 CC acts as an antagonist to integrin receptors. The invention provides
 CC various synthetic peptides which act as cell adhesion modulators because
 CC they mimic extra-cellular matrix ligands or other cell adhesion ligands
 CC that bind to receptors such as integrin receptors, including fibronectin,
 CC laminin, LFA-1, MAC-1, p150.95, vitronectin and gp1b/IIb receptors.
 CC Some of the peptides contain the amino acid sequence Arg-Gly-Asp (RGD).
 CC Others contain non-RGD sequences, for e.g RGD sequences, and reverse
 CC orientation forms of amino acid residues. The synthetic peptides
 CC are useful in modulating cell adhesion, including adhesion related to
 CC fibronectin, as well as leukocyte adhesion to endothelial cells. They
 CC are also claimed to be useful in the study, diagnosis, treatment or
 CC prevention of diseases which relate to cell adhesion, e.g. adult
 CC respiratory distress syndrome (ARDS), thrombosis and inflammatory
 CC conditions.
 SQ Sequence 8 AA;

Query Match 100.0%; Score 41; DB 31; Length 8;
 Best Local Similarity 100.0%; Pred. No. 7.31e+01;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 2 grgesp 7
 |||||
 QY 1 GRGESP 6

RESULT 12
 ID W86167 standard; peptide; 6 AA.
 AC W86167;
 DT 04-MAR-1999 (first entry)
 DE Peptide used in gel contraction assays.
 KW Wound contraction; reduction; inhibition; tissue regeneration; scar;
 KW wound; joint motion; body deformation; gel contraction.

OS Synthetic.
 PN US585194-A.
 PD 22-DEC-1998.
 PF 06-JUN-1995; 473025.
 PR 08-JUN-1995; US-473025.
 PR 28-APR-1994; US-234979.
 PA (LJOL-) LA JOLLA CANCER RES FOUND.
 PI Polarek J, Schreiber R;
 DR WPI; 99-080478/07.
 PT Inhibition of wound contraction - with peptide derivatives rich in
 basic amino acids
 PS Example 2; Column 13; 16pp; English.
 CC The invention provides methods for reduction or inhibition of wound
 contraction that comprises administration of a peptide having more than
 3 consecutive basic amino acid residues. Alternatively, the peptide
 contains the amino acid sequence Arg-Gly-Asp and a basic amino acid
 sequence, or the peptide comprises 6-30 amino acids in which at least
 4 out of a sequence of 6 consecutive amino acids are basic amino acids.
 CC The method is used to allow normal tissue regeneration without excessive
 scar formation which, in the case of large wounds, can result in loss of
 joint motion or major body deformation. This peptide is used in gel
 CC contraction assays along with the claimed peptides (W86170-83) to
 CC determine the activity of a peptide to reduce or inhibit gel contraction.
 SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 39; Length 6;
 Best Local Similarity 83.3%; Pred. No. 9.97e+01;
 Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
 |||:|
 QY 1 GRGESP 6

RESULT 13
 ID W71248 standard; Peptide; 6 AA.
 AC W71248.
 DT 18-NOV-1998 (first entry)
 DE Peptide sequence of the invention.
 KW Hepatitis drug; integrin inhibitor; integrin binding; VLA-4; treatment;
 KW Hepatitis.
 OS Synthetic.
 PN W09837914-A1.
 PD 03-SEP-1998.
 PF 26-FEB-1998; J00802.
 PR 26-FEB-1997; JP-042493.
 PA (TORA) TORAY IND INC.
 PI Kainoh M, Moriya K, Tanaka T;
 DR WPI; 98-480938/41.
 PT Integrin inhibitors including antibodies, proteins, nucleic acids,
 PT saccharide(s), capable of binding to integrin(s) as active
 PT ingredient in remedies - for treating hepatitis, by inhibiting cell
 PT adhesion
 PS Example 4; Page 19; 35pp; Japanese.
 CC The present sequence is used in the course of the invention. The
 CC specification describes Hepatitis drugs which contain integrin
 CC inhibitors as the active ingredient. These integrin inhibitors include
 CC antibodies, proteins, polypeptides, peptides, nucleic acids, saccharides,
 CC and their derivatives. They also include low molecular weight compounds
 CC capable of binding to integrins (e.g. alpha chain type with alpha 1,
 CC alpha 2, etc., or beta chain type with beta 1, beta 2, etc.),
 CC particularly anti-VLA-4 antibody, VLA-4 inhibiting peptides and low
 CC molecular weight VLA-4 inhibiting compounds. The products can be used
 CC for treating hepatitis.
 SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 35; Length 6;
 Best Local Similarity 83.3%; Pred. No. 9.97e+01;
 Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
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 QY 1 GRGESP 6

RESULT 14
 ID W79658 standard; peptide; 6 AA.
 AC W79658.
 DT 08-DEC-1998 (first entry)
 DE Cyclo(1,6)-Gly-Arg-Gly-Asp-Ser-Pro.
 KW Platelet aggregation inhibitor; antithrombotic; antimetastatic; cyclic.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT Modified_site 1..6
 FT /note= "the alpha-amino group of Gly(1) is condensed
 with the carboxy of Pro(6) to give a cyclic molecule."
 FT US5643872-A.
 PD 01-JUL-1997.
 PF 26-AUG-1994; 296621.
 PR 19-DEC-1990; US-630124.
 PR 23-OCT-1989; US-423906.
 PR 28-SEP-1990; US-590635.
 PR 26-AUG-1994; US-298621.
 PA (SMIK) SMITHKLINE BEECHAM CORP.
 PI Ali FE, Samanen JM;
 DR WPI; 97-350267/32.
 PT New peptide derivatives - are useful in inhibiting platelet
 PT aggregation and clot formation, and for inhibiting reocclusion of
 PT blood vessels following fibrinolytic therapy.
 PS Disclosure; Column 7; 28pp; English.
 CC The patent describes new cyclic peptides which have a core of formula
 CC -B-Gly-Asp-, where B = a D- or L-amino acid chosen from Arg, Harg
 CC (i.e. homocysteine), (Me2)Arg, (Et2)Arg and Lys (or an alpha-substituted
 CC derivative of these). Cyclisation is effected through specific types of
 CC covalent linkages. The cyclic peptides are platelet aggregation and clot
 CC formation inhibitors. They may be used in treatment of acute myocardial
 CC infarction, deep vein thrombosis, pulmonary embolism, dissecting
 CC aneurysm, transient ischaemic attack, stroke, unstable angina, or
 CC disseminated intravascular coagulation, septicemia, surgical or
 CC infectious shock, post-operative and post-partum trauma, cardiopulmonary
 CC bypass surgery, incompatible blood transfusion, abruptio placenta,
 CC thrombotic thrombocytopenic purpura, snake venom and immune diseases.
 CC They may also be used for inhibiting reocclusion of blood vessels
 CC following fibrinolytic therapy. They may also be used in prevention of
 CC metastatic conditions.
 CC The present sequence is a specific example of the new peptides.
 SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 35; Length 6;
 Best Local Similarity 83.3%; Pred. No. 9.97e+01;
 Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
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 QY 1 GRGESP 6

RESULT 15
 ID R37029 standard; peptide; 6 AA.
 AC R37029;
 DT 18-AUG-1993 (first entry)
 DE Peptide for isolating cell surface receptors.
 KW Affinity chromatography; matrix-linked; vitronectin receptor.
 OS Synthetic.
 PN US5206347-A.
 PD 27-APR-1993.
 PF 06-AUG-1985; 763046.
 PR 06-AUG-1985; US-763046.
 PR 09-SEP-1988; US-242712.
 PR 13-JUL-1990; US-553355.
 PA (LJOL-) LA JOLLA CANCER RES FOUND.
 PI Pierschbacher MD, Ruoslahti EI;
 DR WPI; 93-151781/18.
 PT Cell surface receptors isolation from cell extracts - by affinity
 PT chromatography using matrix linked peptide contg. arginine
 PT glycine aspartic acid sequence, for serum spreading factor

PS Disclosure; Page 8; 8pp; English.
CC The peptide contains the sequence Arg-Gly-Asp, which is also present
CC in the binding site of fibronectin. The peptide is coupled to a
CC matrix and used in an affinity chromatography column. The column
CC may be used to bind the vitronectin, fibronectin, fibrinogen and von
CC Willebrand's factor receptors from osteosarcoma or other mesenchymal
CC cells and platelets. The receptors may be incorporated into
CC liposomes for drug delivery or used as prostheses where attachment
CC of extracellular matrix is required.
SQ Sequence 6 AA;

Query Match 97.6%; Score 40; DB 7; Length 6;
Best Local Similarity 83.3%; Pred. NO. 9.97e-01;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 grgdsp 6
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QY 1 GRGESP 6

Search completed: Thu Dec 23 10:12:34 1999
Job time : 19 secs.